

**Review of the Application Express System Implementation - Phase I**  
**Report No. 98-01, October 7, 1997**

**BACKGROUND**

One of the primary missions of the RRB is to administer the Railroad Retirement Act. Section 2 (d)(1) of the Act specifies that filing an application is one of the requirements for entitlement to survivor benefits [see 45 United States Code 231a (d)(1)]. Filing applications for survivor benefits at the RRB was a manual process until the creation of the APPLE system.

The Application Express (APPLE) system allows RRB employees to enter survivor benefit applications directly into the computer system. The Bureau of Information Services (BIS) designed the system to replace paper-based survivor benefit applications and supporting forms with computer screens. In addition, the system evaluates application information, calculates, and issues a payment.

Although the APPLE system is capable of mechanically processing some cases, others require manual processing to prevent the payment of an incorrect annuity rate. The survivor payment system links with the APPLE system to allow mechanical processing. In addition, claims examiners use the survivor payment system to manually process cases.

RRB employees who collect application information in the field offices enter application data into the APPLE system.

From February 1997 through July 1997, about 3,600 cases were entered into the APPLE system. Of these cases, APPLE mechanically processed about 2,600 benefit payments (72%). The remaining cases were sent for manual award action (23%) or are waiting for additional information (5%) such as a wage record. After eliminating a situation requiring the APPLE system to send a case for manual processing, the volume of these cases dropped to 12% in July 1997. The APPLE system also sent about 900 cases for manual transfer to the Social Security Administration for the payment of survivor benefits. The APPLE system was not designed to process these cases.

The BIS is developing the APPLE system in three phases: 1) converting spouse annuitants to widow(er) annuitants, 2) paying lump sum death benefits, and 3) paying the remaining survivor applicants such as children. This review focuses on phase one. The total cost for the development of phase one was \$481,804, including direct and indirect costs for all BIS and user analyst staff. Phase two of the APPLE system is currently under development.

The BIS uses the Automated Data Processing (ADP) Standards and Procedures manual for guidance on designing, developing, implementing, and maintaining computer application systems to satisfy the RRB's business needs. In addition, the BIS uses

incident control forms to document changes made to the system during acceptance testing and implementation.

This is the second review of the first phase of the APPLE system. The first report, Application Express System Development - 1, Audit Report No. 97-04, was issued in November 1996. The focus of that review was to determine whether the documentation of user requirements complied with applicable procedures and Federal regulations.

## **SCOPE AND METHODOLOGY**

The overall objective for this review was to assess the adequacy and completeness of system implementation activities for phase one of the APPLE system. To attain these objectives, we:

- ! reviewed APPLE system documentation of controls, edits, access privileges, maintenance documents, and test documents;
- ! reviewed 175 incident control forms;
- ! observed a demonstration of the features and functions of the APPLE system listed in the documentation of user requirements;
- ! interviewed RRB management;
- ! reviewed two system generated reports;
- ! reviewed 64 records to determine if APPLE sends accurate data to the survivor calculation and payment system;
- ! observed a demonstration of the survivor tracking and reporting system, which receives APPLE data for the cases that must be manually processed; and
- ! reviewed training materials and written procedures.

The review was performed in accordance with generally accepted auditing standards appropriate for the objective described. Auditors performed the fieldwork at the RRB's headquarters office in Chicago, Illinois, from April 1997 through August 1997.

## **RESULTS OF REVIEW**

In general, APPLE system implementation activities are adequate and complete. APPLE system documentation complies with the guidance provided by the ADP Standards and Procedures manual. Specifically, we determined that:

- ! items in the requirements definition document were implemented in the APPLE system as planned;
- ! system changes are adequately documented;
- ! training materials and written procedures are sufficient;
- ! system edits, contingency plans, maintenance documentation, test plans, and system generated reports are adequate;
- ! APPLE sends sufficiently accurate data to the survivor calculation and payment system; and
- ! APPLE sends the correct number of cases to the survivor tracking and reporting system that require manual processing.

However, improvements are needed because more than 30 RRB employees had data-entry access privileges to APPLE that were not needed to fulfill their job duties. In addition, the BIS has not incorporated instructions for the incident control form, used to document system changes, into the ADP Standards and Procedures manual.

Descriptions of the areas that require improvement are discussed below.

#### Unnecessary Access Privileges

During the review, the OIG noted that 31 RRB employees in the field offices had data entry access privileges to APPLE that were not needed to fulfill their job responsibilities. According to APPLE documentation, only employees who collect application information should have data entry access privileges. Management indicated that regional office and headquarters employees also need the access privileges for emergency purposes and for office inspections.

With data entry access, RRB employees have the ability to convert a spouse record to a widow record. Specifically, this data entry access permits the entry of the employee's date of death, verification that proof of death exists and was reviewed, entry of data pertaining to the widow, and change of address. After these actions have been completed, APPLE attempts to process the case mechanically.

When people have unnecessary data entry access privileges, there is a potential for entering unauthorized or fraudulent transactions.

Management stated that these unnecessary access privileges were requested due to oversight. According to management, in the future they will be more cognizant of requesting data entry access privileges only for the people who need the access to perform their job duties.

After the OIG brought this matter to management's attention, the BIS removed the unnecessary access privileges for the 31 employees. Due to the corrective action already taken, the OIG will not make a recommendation for this area.

#### Incident Control Forms

The ADP Standards and Procedures manual contains no instructions for completion of incident control forms. The BIS prepared 175 incident control forms for this phase of APPLE's development.

The BIS uses incident control forms to identify and control all changes required during acceptance testing and implementation. RRB employees use the ADP Standards and Procedures manual for guidance on system development projects. The form supplements the procedures in the ADP Standards and Procedures manual.

RRB management felt that documenting the procedures outside of the ADP Standards and Procedures manual would be sufficient. However, if an incident control form is not completed, there is a potential risk that the necessary systems changes may not be made. We did not identify any instance in which the form was not completed when necessary.

#### Recommendation:

The CIO should ensure that the incident control form instructions are incorporated into the ADP Standards and Procedures manual.

#### Action Official's Response

Management concurred with this recommendation and the target implementation date is March 31, 1998.